

City of Fredericksburg		
Building and Community Services Department		
Residential Inspection Matrix		
Type of Inspection	Inspection Requirements	Prerequisite Inspections
First erosion * Prior to any excavation work	<ul style="list-style-type: none"> <li>- All required erosion and sediment controls are in place</li> <li>- <b>Approved plans shall be on site for all inspections</b></li> </ul>	- N/A
Footing * Prior to placing any concrete	<ul style="list-style-type: none"> <li>- Minimum 24" below grade</li> <li>- Footing is free of loose dirt and debris</li> <li>- All steps and reinforcing steel bars are in place</li> <li>- Footing bottom is on solid undisturbed soil</li> </ul>	- First erosion
Foundation – Masonry * Prior to installing any framing	<ul style="list-style-type: none"> <li>- After wall is complete including the installation of all sill plate ties</li> <li>- Prior to placing any backfill</li> <li>- Maintain a minimum of 2" footing projection on both sides of wall</li> </ul>	- Footing
Foundation – Concrete Poured Wall * Prior to placing any concrete	<ul style="list-style-type: none"> <li>- After all form panels have been erected and steel reinforcing is in place</li> <li>- Maintain 2" projection on both sides of wall panels</li> <li>- Form release applied to panels before erecting</li> <li>- No oil, waste oil, diesel fuel, or any other petroleum product can be used as a form release.</li> <li>- No release solution can be on steel reinforcing bars, footing, or form ties.</li> <li>- Sill plate ties shall be on site</li> <li>- Top of forms shall be marked to show the locations of the sill plate ties.</li> </ul>	- Footing
Drain tile/waterproofing/backfill * <b>DO NOT PLACE ANY BACKFILL AGAINST THE FOUNDATION WALL UNTIL STRUCTURAL FRAMING IS IN</b>	<ul style="list-style-type: none"> <li>- Drain tile installed per code. 2" gravel under and a minimum of 6" gravel over with a filter membrane covering the gravel</li> </ul>	- Foundation

<b>PLACE OR FOUNDATION WALLS ARE BRACED</b>	<ul style="list-style-type: none"> <li>- Basement walls shall be waterproofed</li> <li>- Drain tile daylighted or to sump crock</li> </ul>	
Interior drain tile * Prior to any floor slab preparation.	<ul style="list-style-type: none"> <li>- Drain tile is flat with no obstructions or deformities</li> <li>- Drain tile and areaway drains are installed into sump crock and sealed</li> <li>- Sump crock is installed, graded, and secured in place</li> </ul>	- Foundation
<b>Type of Inspection</b>	<b>Inspection Requirements</b>	<b>Prerequisite Inspections</b>
Below slab rough-in * Prior to any floor slab preparations.	<ul style="list-style-type: none"> <li>- All trade rough-ins are completed and visible for inspection</li> <li>- Electrical – All conduits are secured in place and turned up above top level of proposed slab</li> <li>- Plumbing – All water and DWV pipes are secured in place, completely visible and have the required test (see trade rough-in)</li> <li>- All water line penetrations through the slab shall be protected</li> </ul>	- Foundation
Slab – concrete * Prior to placing any concrete	<ul style="list-style-type: none"> <li>- A minimum of 4" gravel base in place graded flat</li> <li>- Slab thickness designated by wall marks and/or grade pegs.</li> <li>- Perimeter insulation (where required) is in place at proper grade.</li> <li>- 6 mil polyethylene vapor barrier with lapped joints in place</li> </ul>	- Foundation - Below slab rough-in
Roofing dry-in * Prior to installing roof covering (shingles)	<ul style="list-style-type: none"> <li>- All roof sheathing is installed and all crickets and saddles are completed</li> <li>- Appropriate underlayment has been installed, covering sheathing</li> <li>- Ice barrier underlayment has been installed from the eave's edge to a point at least 24" inside the exterior wall line of the building</li> <li>- All plumbing vent collars are properly installed</li> <li>- Drip edge is installed</li> </ul>	- Foundation
Veneer * Prior to installing any siding	<ul style="list-style-type: none"> <li>- Wall sheathing has been properly installed and nailed properly</li> <li>- All windows and doors are properly installed</li> <li>- Weather-resistant sheathing paper has been properly installed and properly sealed and taped.</li> <li>- All exterior flashing is properly installed</li> </ul>	- Foundation - Can be done with Roofing dry-in

<p>Trades rough-in * Prior to insulating</p>	<p><b>ELECTRICAL</b></p> <ul style="list-style-type: none"> <li>- All wiring properly installed and secured</li> <li>- All boxes made up (wires stripped and ground wires connected)</li> <li>- All wiring installed and properly terminated in service panel</li> </ul> <p><b>PLUMBING</b></p> <ul style="list-style-type: none"> <li>- All water and DWV piping is properly installed and secured</li> <li>- DWV tested with not less than a 10 foot head of water, above the highest fixture of the completed system or a 5 psi. air test.</li> <li>- Water piping test of not less than 100 psi.</li> <li>- Test of 10 psi or less = gauge increments of .10 psi or less</li> <li>- Test of 10 to 100 psi = gauge increments of 1 psi or less</li> <li>- Test of over 100 psi = gauge increments of 2 psi or less</li> </ul>	<p>- Roofing dry-in - Veneer</p>
<p>Trades rough-in (continued)</p>	<p><b>MECHANICAL</b></p> <ul style="list-style-type: none"> <li>- All ductwork is installed and joints are sealed (no insulation)</li> <li>- Air handler is installed</li> <li>- All duct and/or flue chases, both vertical and horizontal, are properly firestopped.</li> <li>- Combustion air ductwork is installed and complete</li> <li>- All gas lines including appliance legs are installed and tested with a minimum of 5psi. air or 1.5 times the proposed working pressure, which ever is greater (see plumbing test gauge specifications)</li> <li>- Gauge scale is limited to a maximum of 5 times the test pressure.</li> </ul>	<p>(continued)</p>
<p>Electric Service * Can be done anytime after Roof dry-in and Veneer inspections have been approved</p>	<ul style="list-style-type: none"> <li>- Two, 8 foot ground rods have been installed and properly connected</li> <li>- Meter base is properly installed and secure</li> <li>- Electric panel is properly installed and secure</li> <li>- Service conductors are properly installed</li> <li>- At least one GFCI protected circuit has been installed with breaker</li> </ul>	<p>- Roof dry-in - Veneer</p>
	<ul style="list-style-type: none"> <li>- All framing members, both structural and nonstructural, shall</li> </ul>	<p>- Roof dry-in</p>

<b>Framing</b> * Prior to insulating	be in place - All deficiencies from trades inspections shall be corrected (If performed separately). - All engineered product specifications shall be on site - All draftstopping and firestopping shall be in place - All nailers shall be installed - Roofing and siding shall be completed	- Veneer (Can be done with Trades rough-in)
<b>Insulation</b> * Prior to finals	- All deficiencies from the framing and trades inspections are corrected - Wall insulation is completely installed throughout - Ceiling insulation is installed or eave baffles are installed if using blown-in insulation - Duct insulation is installed and sealed and taped - All ceiling and floor penetrations are sealed including the top and bottom wall plates	- Trades rough-in - Framing
<b>Finals</b> * Prior to issuing the Certificate of Occupancy	- Site work has been completed and the site final has been approved - All electrical work has been completed - All plumbing work has been completed - All mechanical work has been completed - All permitted work has been completed	- Site final - All necessary, required inspections (listed or not)
<b>Miscellaneous Inspections</b>		
<b>Type of Inspection</b>	<b>Inspection Requirements</b>	<b>Prerequisite Inspections</b>
Fireplace - masonry	- Hearth inspection is required after the hearth is framed, flashed, and ready to pour - Firebox inspection after the firebox has been constructed but prior to constructing the throat - Throat inspection after the throat has been completed prior to installing flue liners - Final inspection after the fireplace and chimney are completed	- Footing for chimney
	- Fireplace is in place and permanently secured	- Trades

Fireplace – pre-manufactured	<ul style="list-style-type: none"> <li>- Shaft walls are properly insulated</li> <li>- All draftstopping and firestopping is in place in flue chase and visible for inspection</li> </ul>	- Framing (can be performed with insulation inspection)
Decks/ porches	<ul style="list-style-type: none"> <li>- Pier footing inspection is required prior to placing any concrete</li> <li>- Framing inspection after all framing members are in place and all mechanical fasteners have been installed</li> <li>- Final inspection after all permitted work has been completed</li> </ul>	N/A
Pools	<ul style="list-style-type: none"> <li>- Bonding inspection after all metal has been properly bonded.</li> <li>- Plumbing rough-in inspection after all associated piping has been installed and has proper test (see above plumbing requirements)</li> <li>- Electrical rough-in inspection after all electrical components have been installed prior to energizing.</li> <li>- Final inspection after pool has been completed and the required barriers have been installed</li> </ul>	N/A

#### NOTES

- This inspection matrix is not intended to be all inclusive. It is meant to supply general guidelines. Please call with any questions. (540) 372-1080
- The approved plans shall be on site for each and every inspection.
- All work shall conform to the current edition of the Virginia Uniform Statewide Building Code whether shown or not.
- Third-party inspectors, which have been pre-approved by the City of Fredericksburg, may perform the following inspections; footing, foundation walls, concrete slabs, foundation waterproofing, interior and/or drain tile and backfill, according to the Third Party Inspection Policy. The permit holder is responsible for all costs associated with retaining the Third Party Inspector.